

**Innovative Mitigation in an Historic Agricultural Landscape:
U.S. Highway 35 in Mason and Putnam Counties, West Virginia**

by

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U.S. Highway 35 is an important regional route that stretches from Indiana to I-64 in Hurricane, Putnam County, West Virginia. The existing U.S. 35 in West Virginia parallels the Kanawha River between Point Pleasant and I-64, passing through a river valley with farmland with various significant historical associations and largely untouched by development. Native peoples camped here. George Washington slept here (once). Civil War generals grew up and grew old here. Goods and materials floated to market here and families built their lives on farms along the Kanawha River.

Unfortunately, as movement of goods has evolved from water to rail to road, this two-lane portion of U.S. 35 became known as a deficient section of highway, congested with motor freight traffic. The presence of many historic farms along the Kanawha River Valley was a major concern during the planning of a new U.S. 35 facility and years of study finally resulted in the design of a four-lane upgrade. In the initial environmental studies, a number of National Register properties were identified along the existing U.S. 35 two-lane road. However, in 2003, an additional resource previously unaccounted for in the eligibility determinations was formally listed on the National Register. The preferred alignment bisected this property, the Smithland Farm National Register Historic District, resulting in an adverse effect to the resource. Although the environmental complexities and long-term nature of the project have presented challenges,

the consultation process has ultimately provided opportunities for creative problem-solving that both provides improved travel and recognizes and protects the historic landscape. The upgraded U.S. 35 remains a work in progress today, but has emerged as an example of the way the processes and laws governing cultural resources should work: it's not always easy, but it's a true compromise reached with travelers and the community in mind.

HISTORY OF THE PROJECT AREA

Prior to the arrival of white settlers in the 1740s, the Kanawha River was used as a thoroughfare by native peoples. The Kanawha is formed where the Gauley River flows into the New River in the New River Gorge, and together, these waterways have played an important role in westward movement from Virginia. The Buffalo Trail followed the Kanawha River from its confluence with the Ohio River to Cedar Grove in Kanawha County and later, the James River and Kanawha Turnpike was built between 1820 and 1832 from Richmond to Charleston along the same general path. In addition to travel along its banks, the river itself was used for transportation by keelboats and later, after the construction of locks starting in 1898, steamboats, barges and other larger vessels.¹

Land along the Kanawha River was desirable due to its suitability for agriculture and proximity to water transportation. In 1754, Lieutenant Governor Dinwiddie of Virginia offered shares in land along the Kanawha River as an enticement for soldiers to enlist in Lieutenant Colonel George Washington's regiment in the French and Indian War. Washington was not able to travel to the area to survey the land grant until 1770, when he, along with surveyor Samuel Crawford and veteran James Craik, traveled by canoe to the Ohio and Kanawha Rivers. They identified the finest areas of land along the Kanawha and Crawford returned in subsequent years to survey the parcels and divide them among a number of veterans. Washington received almost

¹ *West Virginia Encyclopedia*, s.v. "Kanawha Trail," "James River and Kanawha Turnpike", "Kanawha River."

20,000 acres, but never returned to the area². The land surveyed was generally located between the riverbank and the top of the ridge that runs parallel to the river. Though the original parcels have been divided, sold and reconfigured over the years, the boundary line along the ridge is still well-known locally as the “Military Line” and is valued as the region’s connection to George Washington.

The Washington land grant encompasses some of the Kanawha River valley’s most prominent farms in Mason and Putnam counties. A number of these farms are owned by the McCausland family, descendants of Confederate General John McCausland. General McCausland is notable in Mason County as a figure of historical interest and is notorious in certain other locales for his actions during the Civil War. McCausland was born in St. Louis in 1836 and moved to Henderson in Mason County, Virginia at age 13 to live with relatives upon the death of his parents. He graduated from the Virginia Military Institute in 1857 and served on its faculty with Thomas J. “Stonewall” Jackson. At the outset of the Civil War, McCausland organized the 36th Virginia Infantry and rose quickly to the rank of brigadier general. In 1864, McCausland was ordered by General Jubal Early to raid Chambersburg, Pennsylvania and demand a ransom from its citizens of \$100,000 in gold. The citizens, suspecting McCausland of bluffing, refused, and McCausland burned the town to the ground.³ After the war ended, McCausland fled to Europe, fearing prosecution for his actions at Chambersburg. He returned in 1867, after receiving a pardon from President Grant, purportedly because McCausland and First Lady Julia Dent Grant had been childhood friends in St. Louis. In spite of the pardon and his considerable intelligence, strategic skill and bravery in other battles, McCausland was notorious

² Edward Redmond, “George Washington: Surveyor and Mapper,”

³ Pennsylvania History Commission, “Marker Details: Burning of Chambersburg.”

for decades in Chambersburg and elsewhere, and was said to have remained loyal to the Confederacy until his death in 1927.⁴

McCausland returned to Henderson in Mason County and became a prominent landowner and farmer, yet was said to keep to himself and his family.⁵ He built an impressive house out of large cut stone blocks called Grape Hill that still stands. He was also interested in innovative agricultural techniques and installed the first tiling system for field drainage in the area, and possibly the state.⁶ McCausland acquired a number of farms around the area, including Smithland Farm in 1892.⁷ The farm was owned by the Redmond family in 1860s, and the farmhouse on the property today was built in 1869 (Figure 1). In 1892, the Redmonds lost the farm and it was purchased by James W. Smith, McCausland's cousin. Smith died a mere 5 months later and left his farm "Smithland" to McCausland.⁸ The farm remained in the family and came to General McCausland's grandsons, Alex and Bright, in 1960. Dr. Alexander McCausland deeded his portion of the property to the West Virginia Department of Agriculture in 1981 to become the John McCausland Memorial Farm and today it remains a working farm.

⁴ James Earl Brown, "Life of Brigadier General John McCausland."

⁵ Brown.

⁶ Michael J. Pulice, "National Register of Historic Places Registration Form: Smithland Farm," Section 8: page 6.

⁷ Pulice, Section 8: page 6.

⁸ Pulice, Section 8: page 5.



Figure 1. Redmond House on Smithland Farm/ John McCausland Memorial Farm.

U.S. 35 PROJECT HISTORY

The purpose and need for an upgrade to U.S. 35 was established in the 1980s. Several U.S. 35 alignments were studied beginning in 1990 with the “Niles Study”, which was funded via an appropriation in the “Department of Transportation and Related Agencies Appropriation Bill, 1989.”⁹ The Final Environmental Impact Statement (FEIS) explored in detail over 20 different build alternatives, including alignments from the Niles Study. Central Alternative Option 1, as designated in the FEIS, was chosen as the preferred alternative and approved by the Federal Highway Administration (FHWA) in 2000. This identification was based on factors including least number of residential relocations, least impact to streams and wetlands, no adverse effects to National Register eligible or listed properties, greater level of traffic service with other roads, economic savings and public comment.¹⁰ In the project area from Couch

⁹ *Final Environmental Impact Statement*, 1-2.

¹⁰ *Final Environmental Impact Statement*, 2-28.

(Mason Co. Route 27) to Beech Hill (Mason Co. Route 40), the preferred alternative is located approximately 0.5 – 1 mile parallel to the south and west of the existing US 35.

At the time the FEIS was approved in 2000, Central Alternative Option 1 avoided all identified National Register properties along the corridor. However, during the final design process, between 2004 and 2006, a previously unidentified historic resource (John McCausland Memorial Farm) was identified. In the initial cultural resource survey conducted as part of the April 2000 FEIS, the farm was found not to be eligible for the National Register of Historic Places. In 2003, the John McCausland Memorial Farm, also known as the Smithland Farm, was listed on the National Register of Historic Places under Criteria A and C. The preferred alternative from the FEIS passed directly through the National Register boundary delineated for the John McCausland Memorial Farm, creating the need for Section 106 consultation and a Late-Find 4(f) evaluation (Figure 2). The consulting parties for the Section 106 process included members of the McCausland family, the State Historic Preservation Office (SHPO) and the West Virginia Department of Agriculture (WVDA).

The McCausland family descendents were the driving force behind the consultation process, due to their strong convictions regarding farmland preservation as well as their devotion to their family history and Kanawha Valley history. While the family supported the project and appreciated the need for improved safety and efficiency, they were determined that the U.S. 35 upgrade should do as little harm as possible to the bucolic atmosphere of the area. Over the many months of discussion regarding effects and mitigation, this goal was constantly reinforced by the McCausland family. The resulting mitigation plan, achieved through the collaboration of many transportation employees, consultants, citizens and government officials, is steeped in these ideas of heritage and farmland preservation.

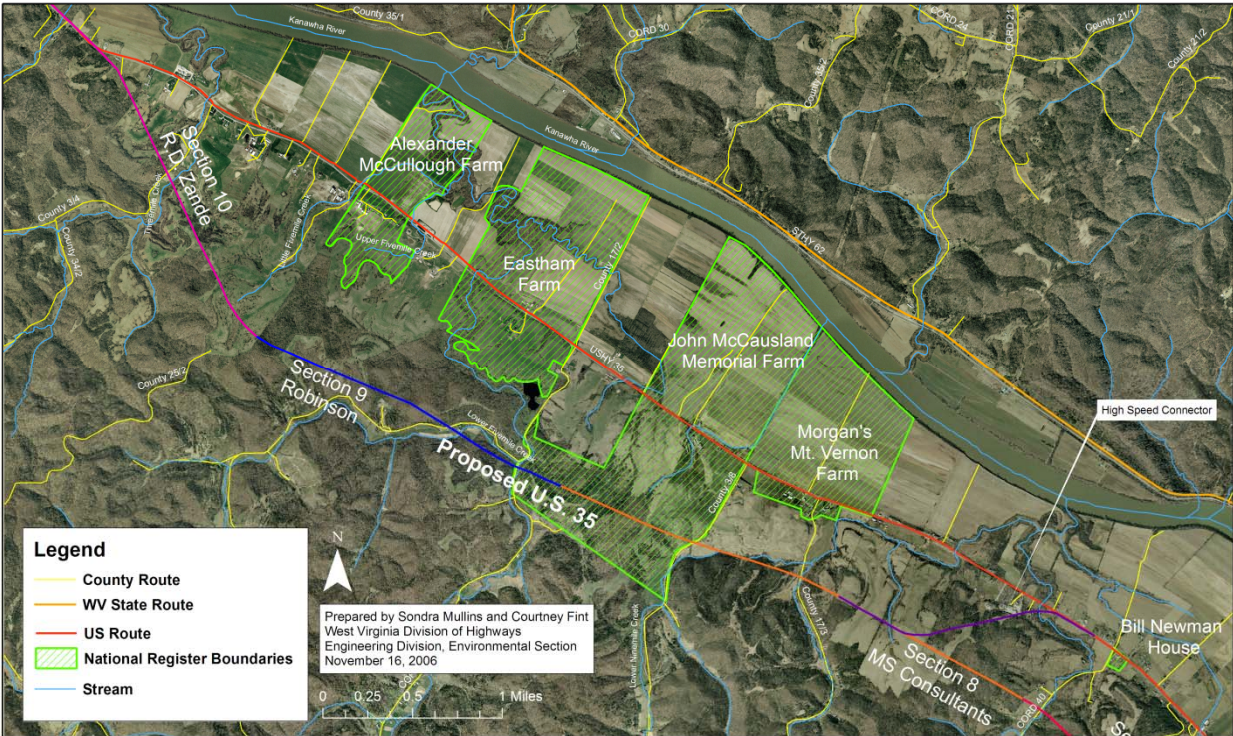


Figure 2. Project area showing National Register properties in relation to Central Alternative Option 1. The proposed road was designed in sections by various engineering consultants. (Source: West Virginia Division of Highways Environmental Section, 2006)

MITIGATION PLAN

Due to the complexities of the U.S. 35 project, a more in-depth mitigation plan was created instead of the standard agreement documents. The mitigation plan report for John McCausland Memorial Farm included the project background, an overview of the decision-making and consultation process and the historical background of the property in addition to the mitigation stipulations. After over a year of negotiation, the mitigation plan was signed by all the consulting parties in July 2008. Eleven mitigation stipulations were identified and address the effects of the project in a variety of ways. These stipulations are highlighted below.

Study and Selection of a Minimization Alternative

Engineers with the FHWA, West Virginia Division of Highways (WVDOH) and E.L. Robinson Co., the consulting engineers, considered a number of additional alternative alignments, including revisiting the existing alignment, no-build and total avoidance. All of the additional alternatives posed significant challenges due to factors such as excessive earthwork, power company transmission towers and floodplain issues. At the suggestion of the McCausland family, a minimization alternative (Alternate 7) was studied that located the road generally behind the ridge at the back boundary of the property, roughly near the Military Line. E.L. Robinson, Co. used innovative visualization techniques in order to demonstrate the viewshed effects of the minimization alternative. These fly-throughs and renderings were instrumental in achieving consensus, particularly from the McCausland family and SHPO, on the selection of the minimization alternative. The proposed road in the context of the surrounding landscape could be clearly shown from any point on the property (Figure 3). Even though this alternative still crossed the National Register boundary, the McCauslands indicated that it was acceptable due to its minimal effect on the viewshed. In addition, the minimization alternative did not require relocation of transmission towers and even resulted in an earthwork balance of cut and fill for the project (Figure 4). Based on the additional studies, the WVDOH committed to select the minimization alternative and fund its design and construction in the mitigation plan.

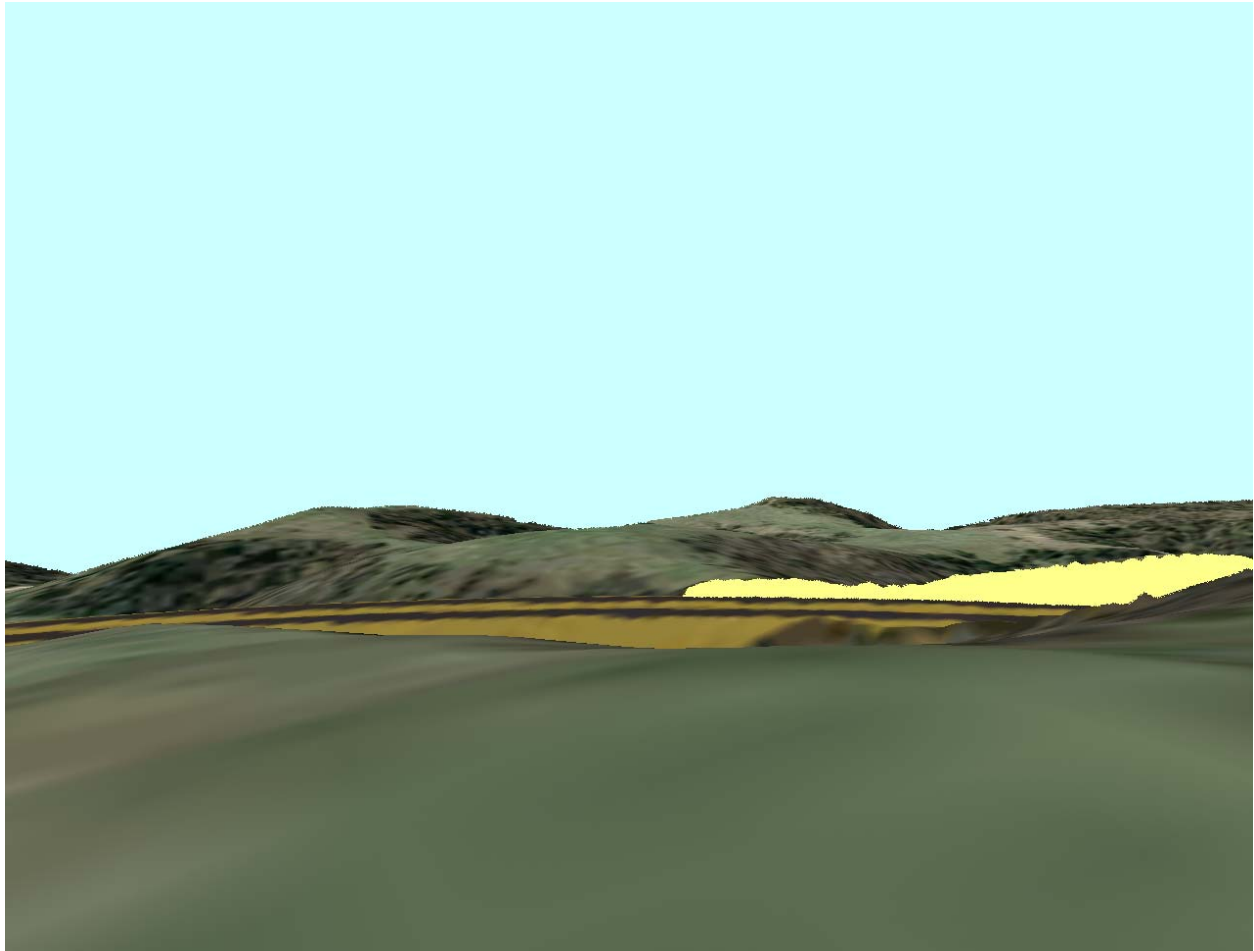


Figure 3a. Sample viewshed rendering showing Minimization Alternative looking southwest from high point on ridge. Visible earthwork cut areas are shown in yellow.
 (Source: E.L. Robinson Co., Cross Lanes, WV, 2007)

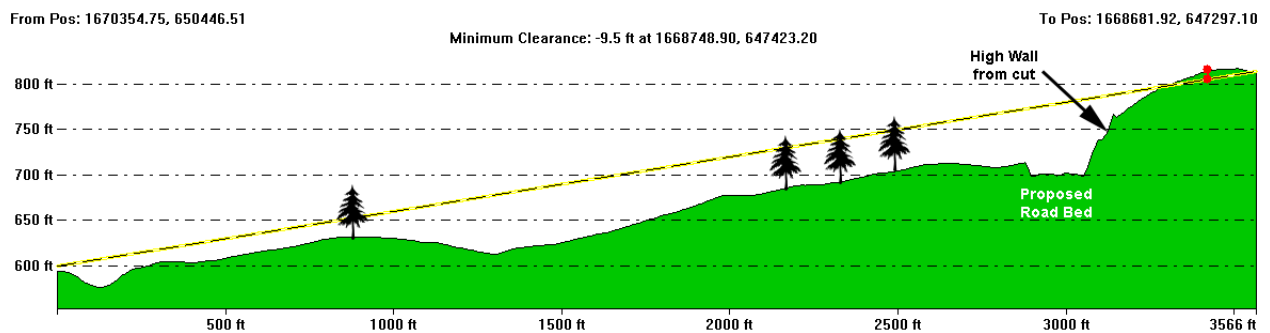


Figure 3b. Sample line-of-sight study for Central Alternative Option 1 from Redmond House looking towards high point on ridge. (Source: E.L. Robinson Co., Cross Lanes, WV, 2007)

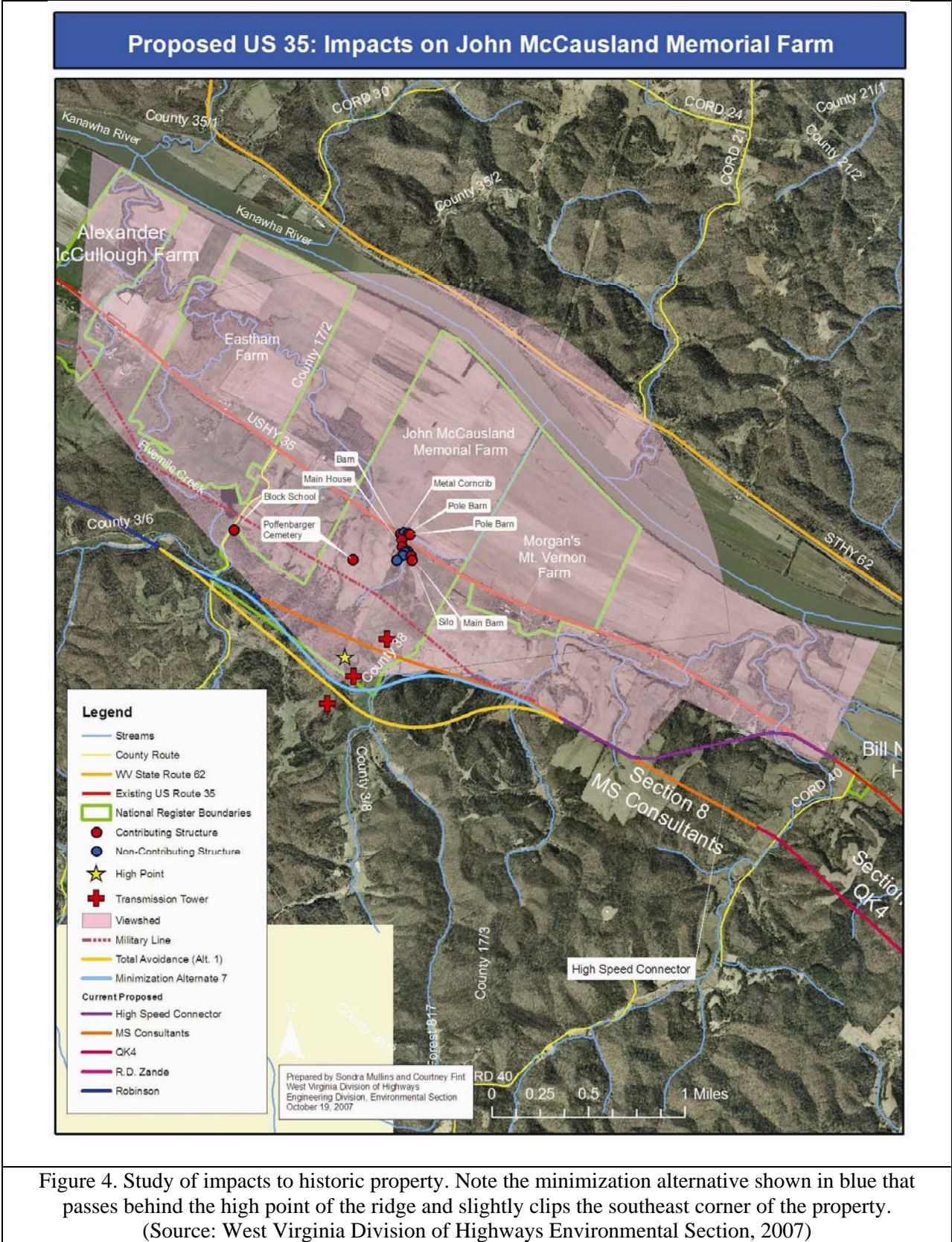


Figure 4. Study of impacts to historic property. Note the minimization alternative shown in blue that passes behind the high point of the ridge and slightly clips the southeast corner of the property. (Source: West Virginia Division of Highways Environmental Section, 2007)

Restoration of the Redmond House

The Redmond House, built in 1869, is a contributing resource to the John McCausland Memorial Farm/Smithland Farm historic district and is owned by the WVDA. The house had been vacant for many years and was slowly deteriorating due to its lack of purpose within the state-operated farm. The McCausland family felt very strongly that the Redmond House should be restored as a museum to highlight local history and the importance of farms. Establishment and operation of a museum was an unknown realm to both the WVDOH and the WVDA, and the Division of Culture and History lacked the resources to operate such a facility. Nevertheless, the WVDOH agreed to fund the creation of a master plan by an architect for the facility and to fund the rehabilitation of the structure up to an amount of \$500,000. In order to protect this investment and provide for the structure's use, the mitigation plan required creation of a stewardship agreement between WVDOH and WVDA for maintenance and operation of the structure.

During the ongoing process of working with the architect, Chapman Technical Group of St. Albans, West Virginia, to create the master plan, the Mason County Tourism Board came forward with interest in operating the house as the West Virginia welcome center for the National Quilt Trail, an agriculture-themed scenic driving route. The Mason County Tourism Board and its partners provided a missing link for the future use of the Redmond House and cooperated enthusiastically in discussions with SHPO and other consulting parties involving the master plan and programming. In addition to serving as a welcome center, the Redmond House will include exhibits on the history of Smithland Farm, the McCausland family, transportation and the Kanawha River Valley, and will provide meeting space for local agriculture-related community groups and events. The Redmond House will also have the potential to showcase and incorporate some WVDA initiatives such as West Virginia-made products and agricultural

tourism. Though at the writing of this paper, the project is still in progress, it has proved thus far to provide opportunities to the community beyond what was anticipated.

Oral Histories and US 35 Documentary

It was the wish of the McCausland family to obtain and preserve oral history accounts from some older members of the family. A number of video interviews were conducted by filmmakers from the West Virginia Department of Transportation (WVDOT) Office of Communications and will be part of a package of archival material provided to the West Virginia State Archives, local libraries, schools and other repositories. Also in production is a feature documentary written, produced and filmed by the WVDOT Office of Communications. The film presents information regarding the area in three general sections: early Kanawha Valley history, the Civil War era, and agriculture. In order to ensure approval of the final product by all the consulting parties, the film has been subject to ongoing review in stages. As parts of the script were completed and sections of the film were edited and finalized, these items were submitted to the SHPO, FHWA, McCausland family, Mason County Tourism Board, independent professional historians, archaeologists, and others for review and comment. The ongoing involvement of all consulting parties, especially the McCausland family, has been key in achieving the desired overarching message of the film, which is appreciation and preservation of the agricultural heritage of the Kanawha Valley. Along with the rehabilitation of the Redmond House, the documentary is expected to be one of the most publically visible results of the U.S. 35 mitigation.



Figure 5. Filming on location in Kanawha State Forest for U.S. 35 Documentary.
(Photograph by Sondra Mullins, WVDOH Environmental Section, November 2009)

Best Management Practices for Land Use Planning

The land-use planning aspect of the mitigation plan was included in an effort to address the future development that will occur as a result of the new four-lane U.S. 35. Other areas of the state, such as the Eastern Panhandle near Washington, DC and the Teays Valley area in Putnam County have already experienced the growing pains of greater accessibility and population growth. FHWA and WVDOH agreed in the mitigation plan to work with the Mason County Commission on exploring options for land-use planning. One of the members of the Mason County Commission happened to be a state-wide advocate for farmland preservation and proved to be an invaluable local partner in fulfilling this part of the mitigation plan. Rather than

imposing unfamiliar or potentially worrisome concepts, such as zoning, upon the citizens of Mason County, the WVDOH has sought to help build an understanding of possible development pressures and provide suggestions and information on how they can be managed. By working with local citizens and including experts from the WVDA and WVDOT who can communicate their experiences as working farmers in other parts of the state, the WVDOH hopes to foster a grassroots interest in responsible development.

The first step in fulfilling this stipulation came in the form of a presentation to the county commission and interested members of the public in July 2010. The future direction for implementing land-use planning will depend upon the receptiveness and goals of the local community. The FHWA and WVDOH plan on remaining available as resources as Mason County decides its course of action for managing both the benefits and pitfalls of the new road.

Other Stipulations

Other commitments in the mitigation plan were designed to ensure that the WVDA was able to farm effectively throughout construction of the new road and to provide improved access to other parts of the property. The signatories also agreed to provide copies of all films, brochures, reports and other documents to the public via libraries, schools, community organizations, local governments and other avenues. Finally, probably the most conventional mitigation measure included was the placement of a historical marker along the new road, noting the significance of the Kanawha Valley to passing travelers.

Implementing the mitigation plan was, in and of itself, an ongoing feat. Constant communication between all consulting parties on mitigation activities was vital to success. Quarterly progress meetings were held to update FHWA and WVDOT management and other consulting parties on the progress of the mitigation. Working meetings were scheduled between

the quarterly progress meetings in order to hammer out the details of the various parts of the plan, from architectural decisions regarding the Redmond House to screenings of the in-production documentary. With the continued involvement and interest of all the consulting parties, what began as semi-related separate stipulations began to meld into a comprehensive mitigation effort with a consistent message. This result was not forced or even foreseen, but resulted from sustained involvement and communication over many months, even when disagreements existed. The participation of people from different agencies and organizations, with disparate interests and expertise, ultimately provided for a rich pool of resources and ideas from which to draw in fulfilling the mitigation commitments.

The full implementation of the U.S. 35 mitigation is not yet complete, but 2010 saw the turning of a corner with the end vision in sight. To the individuals engrossed in the day-to-day negotiations for a project over the course of many years, the regulations and processes governing cultural resource management can sometimes seem tedious and mired in conflict. However, as evidenced in the U.S. 35 mitigation plan and its implementation, these processes work, and work well, if they are approached with an open mind by all parties involved, and a conviction to do the right thing. Opening a new and improved road, premiering a feature documentary and rehabilitating an historic farmhouse all as part of the same project required many people to step outside their realms of comfort and experience, but the result will be a source of pride for all involved and a benefit to the communities of the Kanawha River Valley.

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The author wishes to acknowledge the contributions of the following people to the successful creation and implementation of the John McCausland Memorial Farm Mitigation Plan.

Kyle McCausland
Smith McCausland
Bob Baird, Mason County Commission
Denny Bellamy, Mason County Tourism Board
Greg Bailey, West Virginia Division of Highways Engineering Division
Ben Hark, West Virginia Division of Highways Environmental Section
Sondra Mullins, West Virginia Division of Highways Environmental Section
Dirar Ahmed, West Virginia Division of Highways Engineering Division
Will Thornton, West Virginia Division of Highways Engineering Division
David Marcum, West Virginia Department of Transportation Office of Communications
Terry Lively, West Virginia Department of Transportation Office of Communications
Perry Keller, West Virginia Department of Transportation Planning Division
Ed Compton, Federal Highway Administration West Virginia Division Office
Tom Smith, Federal Highway Administration West Virginia Division Office
Jason Workman, Federal Highway Administration West Virginia Division Office
Susan Pierce, West Virginia State Historic Preservation Office
Shirley Stewart-Burns, West Virginia State Historic Preservation Office
Gus Douglass, West Virginia Department of Agriculture
Bob Tabb, West Virginia Department of Agriculture
Steve Hannah, West Virginia Department of Agriculture
Dwayne O'Dell, West Virginia Department of Agriculture
Jackie Byars, West Virginia Natural Resources Conservation Service, USDA
Scott LeRose, E.L. Robinson Co.
Tom Rayburn, E.L. Robinson Co.
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